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sufficient contact with the web of material so as to make an effective seal between the component and the web of material.

- 45. The filtration device of claim 44, wherein a surface of the extension member contacts the second major surface.
- 46. The filtration device of claim 44, wherein the extension member has a tip with an end surface, and the end surface contacts the second major surface.
- 47. The filtration device of claim 44, wherein a portion of the extension member is deformed to extend radially outward from the aperture.
- 48. The filtration device of claim 44, wherein a portion of the extension member is deformed toward the base portion.
- 49. The filtration device of claim 48, wherein a portion of the extension member is deformed in a reverse bend toward the base portion.
- 50. The filtration device of claim 44, wherein the extension member has an outer wall with an outer diameter and the aperture in the web of material is sized smaller than the outer diameter.
- 51. The filtration device of claim 50, wherein a portion of the web of material adjacent the aperture is turned along the outer wall.
- 52. The filtration device of claim 44, wherein a portion of the web of material is sandwiched between two portions of the extension member.
- 53. The filtration device of claim 44, wherein a portion of the web of material is sandwiched between the extension member and the base portion.
- 54. The filtration device of claim 44, wherein a portion of the web of material is compressed between the extension member and the base portion.
- 55. The filtration device of claim 44, wherein a portion of the web of material is mechanically clamped between the extension member and the base portion.

- 56. The filtration device of claim 44, wherein there is a fluid tight connection between the component and the filtration material.
- 57. The filtration device of claim 44, wherein there is a gripping feature on the component extending into the thickness of the filtration material to prevent rotation of the component relative to the filtration material.
- 58. The filtration device of claim 44, further comprising an adhesive between the component and the filtration material to prevent rotation of the component relative to the filtration material.
- 59. The filtration device of claim 44, wherein the component comprises an exhalation valve.
- 60. A respiratory mask comprising:
  - a. a web of material comprising a layer of filtration material and having first and second major surfaces and an aperture, and
  - b. an exhalation valve comprising a base portion and an extension member that extends from the base portion through the aperture, the extension member having a deformed portion that contacts a portion of the web of material surrounding the aperture.
- 61. The respiratory mask of claim 60, wherein the deformed portion is in sufficient contact with the web of material so as to make an effective seal between the component and the web of material.
- 62. The respiratory mask of claim 61, wherein there is an effective seal between the component and the filtration material.
- 63. The respiratory mask of claim 60, wherein the deformed portion contacts the second major surface.
- 64. The respiratory mask of claim 60, wherein the extension member is deformed to extend radially outward from the aperture.
- 65. The respiratory mask of claim 60, wherein the extension member has an outer wall with an outer diameter, the aperture in the web of material is sized smaller

than the outer diameter, and a portion of the filtration material adjacent the aperture is turned along a portion of the outer wall.

- A method of attaching a component to a web of material comprising filtration material, the method comprising:
  - a. providing a web of material comprising a layer of filtration material and having first and second major surfaces and an aperture;
  - b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
  - c. inserting the tip through the aperture; and
  - d. deforming the extension member so as to make an effective seal between the component and the web of material.
- 67. The method of claim 66, wherein the component is clamped in fluid-tight relationship to the filtration material.
- 68. The method of claim 66, wherein the extension member is deformed by contact with a forming punch and die, whereby a deformed portion of the extension member is bent relative to a non-deformed portion of the extension member.
- 69. The method of claim 66, wherein the extension member is deformed by cold forming.
- 70. The method of claim 66, wherein the extension member is deformed by thermal forming.
- 71. A method of making a respiratory mask, wherein a component is attached to a mask body, the method comprising:
  - a. providing a mask body comprising a layer of filtration material and having an aperture therein;
  - b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
  - c. inserting the tip through the aperture; and
  - d. deforming the extension member so as to make an effective seal between the component and mask body.

